[07 – 3114]

III/IV B.Tech. DEGREE EXAMINATION.

First Semester

Computer Science and Engineering

FILE STRUCTURES

(Common with I.T.)

(w.e.f. admitted batch of 2004-05 and after batches)

Time : Three hours   Maximum : 70 marks

Question No. 1 is compulsory.
Answer any FOUR of the remaining questions.
All questions carry equal marks. Answer ALL parts of
any question at one place.

1.   (a)   What is the physical file?

(b)   Define Seeking? Give an example.

(c)   What is blocking factor?

(d)   What is the difference between fixed length record and variable length record?

(e)   Define compression.

(f)   What is the formula for track capacity?

(g)   What is a trie?

2. Explain about fundamental file processing operations in detail. (14)

3. (a) Disk drives belong to which class of devices. (2)

   (b) How you can organize data on a disk. Explain by using sectors and by using user defined blocks. (12)

4. Explain about field and record organization in detail. (14)

5. (a) What are the reasons for making files smaller? (4)

   (b) Explain about compression techniques with the suitable examples. (10)

6. (a) How you can improve the secondary index structure as inverted lists? Explain with an example. (9)

   (b) What are operations required to maintain an indexed file? (5)

7. (a) Explain about simple hashing algorithm with the key as LOWELL. (9)

   (b) What are the hashing functions and record distributions? (5)

8. Write short notes on:
   (a) Tries.
   (b) Buddy Buckets
   (c) Maintaining a sequence set.
   (d) Direct access.